



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/517,782	03/02/2000	Oliver Paul Leisten	20676-724	4570

7590 02/28/2002

Wilson Sonsini Goodrich & Rosati  
650 Page Mill Road  
Palo Alto, CA 94304

EXAMINER

KIM, PAUL D

ART UNIT	PAPER NUMBER
3729	

DATE MAILED: 02/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

	<b>Application No.</b>  09/517,782	<b>Applicant(s)</b> LEISTEN ET AL.
	<b>Examiner</b> Paul D Kim	<b>Art Unit</b> 3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### **Status**

1) Responsive to communication(s) filed on 10 January 2002.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### **Disposition of Claims**

4) Claim(s) 1-13 and 20-27 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) 5-9 and 20-24 is/are allowed.

6) Claim(s) 1-4, 10-13 and 25-27 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### **Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 02 March 2000 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

### **Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### **Attachment(s)**

1) Notice of References Cited (PTO-892)                            4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                    5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                    6) Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is a response to the amendment filed on 1/10/2002.

#### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Page 7, line 21, the plating 20. Correction is required.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 10-11 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitations "the aperture having a predetermined width transverse to the direction of the track which is computed automatically in response to the result of the monitoring step" in lines 2-4 of claim 10, and "the width and length of the aperture are variable in response to the said monitoring result" in claim 11 are not described in the specification.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 10-11 and 25-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10: The limitation "a rectangular aperture in the or each affect track" in line 2 renders vague and indefinite. One or more limitations are misses in between "in the" and "or". Correction is required.

Claim 25: The word after "radiation" in line 1, change "a" to --at--. Also, the limitation "an aperture in the or each affect track" in line 5 renders vague and indefinite. One or more limitations are misses in between "in the" and "or". Correction is required.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-13 and 20-27 have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant's arguments with respect to claims 10-11 have been considered but not persuasive. There are no such limitations described in between page 9, line 9 to page 11, line 34 of the specification as originally filed referred by applicant.

9. Claims 25-26 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

## DETAILED ACTION

1. This office action is a response to the amendment filed on 1/18/2002.

### *Drawings*

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Page 7, line 21, the plating 20. Correction is required.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 10-11 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The disclosure from line 9 of page 9 to line 34 of page 11 is completely silent regarding the limitations "the aperture having a predetermined width transverse to the direction of the track which is computed automatically in response to the result of the monitoring step" in lines 2-4 of claim 10, and "the width and length of the aperture are variable in response to the said monitoring result" in claim 11

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 10-11 and 25-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10: The limitation "a rectangular aperture in the or each affect track" in line 2 renders vague and indefinite. One or more limitations are misses in between "in the" and "or". Correction is required.

Claim 25: The word after "radiation" in line 1, change "a" to --at--. Also, the limitation "an aperture in the or each affect track" in line 5 renders vague and indefinite. One or more limitations are misses in between "in the" and "or". Correction is required.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3, 12, 13, 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Filipovic (US PAT. 5,990,847).

Filipovic '847 teaches a method of making a coupled multi-segment helical antenna comprising steps of tuning the frequencies of the antenna by trimming a radiator segments. Fig. 1C and 4-6 of Filipovic '847 shows a plurality of helical track

portions (104) located in a substantially cylindrical substrate surface (406) (Col. 1, line 22 to col. 2, line 40 and col. 4, lines 52-59).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Filipovic '847 in view of Trzakowski (US PAT. 6,189,201).

Filipovic '847 teaches all the claimed invention exception of removing the conductive material by laser. Trzakowski '201 discloses the method of tuning resonance circuits using a laser burning of the conductive layer (col. 1, lines 18-21) included monitoring change in the inductance element during the step of grinding the conductive layer. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify removing the conductive material of a helix antenna of Filipovic '847 by a laser beam as taught by Trzakowski '201 for the purpose of providing more accurate and easy to use than other conventional etching process.

11. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Filipovic '847 in view of Ow (US PAT. 5,349,365).

Filipovic '847 teaches all the claimed invention exception of connecting helical tracks with a plurality of respective connecting pad portions located on a substantially flat end of the surface. Ow '365 teaches a helix antenna included four radiating elements (14') arranged in helical pattern. In Fig. 1, the antenna is formed in a cylindrical shape and connected radiating elements with a plurality of respective connecting pad portions located on a substantially flat end of the surface (col. 2, lines 6-25 and col. 3, lines 3-61). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify a helix antenna of Filipovic '847 by connecting helical tracks with a plurality of respective connecting pad portions as taught by Ow '365 for the purpose of increasing high frequency signals.

#### ***Allowable Subject Matter***

12. Claims 5-9, 20-24 and 27 are allowed.

#### ***Response to Arguments***

13. Applicant's arguments with respect to claims 1-4, 12, 13, 25 and 26 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D Kim whose telephone number is 703-308-8356.

The examiner can normally be reached on Monday-Friday between 6:00 AM to 2:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-9835 for regular communications and 703-305-9835 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5648.

pdk  
February 21, 2002



PETER VO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700